

University of Nebraska - Lincoln

## DigitalCommons@University of Nebraska - Lincoln

---

Action Research Projects

Math in the Middle Institute Partnership

---

7-2008

### Reduce Late Assignments through Classroom Presentations

Cole Hilker

Orchard, Nebraska

Follow this and additional works at: <https://digitalcommons.unl.edu/mathmidactionresearch>



Part of the [Science and Mathematics Education Commons](#)

---

Hilker, Cole, "Reduce Late Assignments through Classroom Presentations" (2008). *Action Research Projects*. 66.

<https://digitalcommons.unl.edu/mathmidactionresearch/66>

This Article is brought to you for free and open access by the Math in the Middle Institute Partnership at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Action Research Projects by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

**Reduce Late Assignments through Classroom Presentations**

**Cole Hilker  
Orchard, Nebraska**

**Math in the Middle Institute Partnership  
Action Research Project Report**

**In partial fulfillment of the MAT Degree  
Department of Mathematics  
University of Nebraska-Lincoln  
July 2008**

## **Reduce Late Assignments through Classroom Presentations**

### **Abstract**

In this action research study of my 7<sup>th</sup> grade math class, I investigated homework presentations, to see if they would reduce the amount of late homework assignments. I did not find any significant results that weekly presentations given by students were beneficial to reduce the amount of late assignments, but found many other positive things that happened because of presentations. As a result of this research, I plan to use classroom presentations because they foster listening skills and student interaction, and promote deeper thinking.

## **Introduction**

This year I used classroom presentations to help generate positive outcomes in the classroom. The primary motive for this action research was to foster deeper student understanding of mathematics. The research also intended to promote positive interaction between students while discussing mathematics. I also wanted to see students deliver sound presentations to their peers. Lastly, I hoped to reduce the amount of late homework assignments handed in by the student population.

For the past 13 years I have taught math to middle school students. I have had both rewards and struggles in the classroom. It seems that students have always wanted to just get the work done. Many never seemed to care how it was presented and some do not seem to care if it is right or wrong. Very few students seem to understand why I give homework. I would like them to realize homework is a tool for learning and not just busy work.

I would like students to realize that one of their best tools for learning is their classmates. Positive peer interaction that is on-task with learning math is an extremely powerful tool. Students can relate easily and understand what one of their friends does not understand when the teacher may not be able to connect with the problem. I have seen at times how students open up to their classmates to understand something and they are less stressed than if I were to assist the student in understanding a concept.

Students can benefit from presentation skills. Speaking with my students, most of them realize that presenting their thoughts and ideas is important. Yet, most of them are too scared and feel unprepared to present. Through presentations to their class, presenters

can generate confidence when speaking in front of groups. They can also teach what they have learned to their peers, thus allowing a new face to re-teach a concept.

I find the most frustrating part of my teaching is getting students to complete their homework. I am constantly working with struggling students to get their assignments in so I can make sure they understand the concept taught and not fall behind the class. I am looking at classroom presentations to help promote learning, student interaction, and help students realize that daily work is relevant so it reduces the amount of late homework.

### **Problem Statement**

I have been teaching math now for 13 years. I taught Title One Math my first year of school in 1995. Then in 1996 – 2004 I taught 6<sup>th</sup> grade math. Then for the last three years I have taught 7<sup>th</sup> and 8<sup>th</sup> grade math. Throughout my 13 years as a math educator I have struggled with growth in the classroom. One criterion that I strongly believe that hampers a student's progress is late homework assignments.

At this time, I have three sections of 7<sup>th</sup> grade math and three sections of 8<sup>th</sup> grade math. The 7<sup>th</sup> grade class uses a textbook that I consider the final stages of general arithmetic and an introduction to pre-algebra. The 8<sup>th</sup> grade students use a pre-algebra textbook that also introduces geometry. The students are given homework an average of four times a week, with Friday being a test date or review date. They do have homework almost every night, Monday through Thursday. The amount of homework from math is 20% - 25% of their total daily homework. Combined with the other classes, students have told me that their homework load every night averages about 60 minutes. This means that one-fifth to one-fourth of their homework comes from math.

Junior high students take a minimum of five classes. On average, (this came from my grade book) about 20% of the students in each class have late papers in math. I have an average of 18 students per class in the 7<sup>th</sup> grade. This means that four students come to school everyday without having their assignment completed. Some of the late papers come from habitual offenders, but surprisingly about half of the late papers come from students who are punctual.

Prior to this research study, when students did not have their assignment completed they were given a reduced grade, according to our grading policy. Students could, however, complete the assignment and retain some of the points lost due to it being late. Reduced grades have had no effect on the rate of homework completion. Students continue to miss assignments. Even though students' grades can be affected, the percentage of late papers seems to stay consistent.

Receiving late grades and affecting their letter grade are not the reasons I am concerned about late work. To me, grades are secondary. Teachers in general give homework to students to gain knowledge about what students have learned and have not learned. I believe that teachers view homework as one of two key factors that show a student's growth (the other being tests that could be used as student assessment). If students do not have their homework completed then teachers lose a measuring stick of what the students understand about the lesson.

I believe for my students to be successful, their homework needs to be completed prior to class time. This allows me to see what the students know and if something needs to be done differently to help the students learn. One avenue is having students present homework to their peers. Presentations would allow me to know the students have the

work completed, and to know what they understand the about the concept. This would hopefully put accountability back into the students' hands to complete the assignment before class. I believe this would give students reason to complete the homework that is given to them daily.

In the classroom world I had six presentations given the last day of each week. I would ask the students to use different media. There are various things that students can do. Our school teaching staff is very fortunate in having a lot of technological media. Students could use the smartboard to show steps, create a power-point presentation, smart-view (which is wireless remotes that allow students to interact with the smartboard), or palms (that students could create quizzes on program called Quizzler). Students could go more traditionally and use the white-board. I would be open to any presentation as long as the student presenting could show how the concept is used and possibly applied. This would be determined based on what type of problems are given to students throughout the week.

I had each presenter picked a specific concept he or she wants to share with the class; most generally I did not allow another student to do the same concept. Every Monday three students were randomly chosen to present that week (I use a program on my palm that shuffles their names and draws randomly). The other three presentations could be done by students who volunteered. The six presenters had all week to work on their presentations. The overall objective is for students to present the problems with mastery. Presenters who are volunteer students showed the class how they understood what was taught. Not only did I hope presenters did their homework and got their assignments done, but I also hoped that they may have helped other students who may

have been struggling with the particular math concept connects with the problem. To make students accountable for their presentations, I gave them a feedback sheet.

I want all the students to present at least twice throughout the quarter. Students were randomly picked by the palm. Then I gave them a grade, using a rubric. Each presentation that a student gave was worth 20 points. If a student did not have the presentation ready on time then there was a grade reduction of 2 points each day after the due date that it should have been presented. Presenters were not considered late if the student talked to me before the presentation day and gave a valid reason why it was not done. Included on the 20 points possible on the presentation, the presenter earned points by having the rest of the class involved, through sample problems.

Through presentations, I hoped that students gained ownership. This is one way I hoped I could learn about late homework assignments. By examining it more closely, homework presentations gave me insight on how to cope with this problem that many educators seem to deal with on a daily basis. I also believe that through this plan that I gained insight that helped me intrinsically motivate my students to learn math. I wanted students to realize math is not about grades but understanding mathematics that will someday help them become stronger individuals in logical and rational thinking skills.

If I can get the students to become more accountable then I will have more success shown on the state assessment tests which are aligned to the National Council of Teaching Mathematics Standards. This Problem Statement directly connects to the following standards and principles: equity, learning, teaching, connections, and representation. NCTM's Learning Principle states that: "*Students must learn mathematics with understanding, actively building new knowledge from experience and prior*



*knowledge*” (2000, p. 20, italics added). I want students to gain an understanding of math that can be utilized outside the classroom. This may seem rather simple and uncomplicated, but students need to understand the mathematics while learning it. I believe too many times students go through a unit or chapter and do not process it. So, not completing homework is one reason why students do not gain a conceptual understanding of the mathematics. I believe that homework allows this to happen, and through class presentations, I hope that students can complete their assignment to gain more knowledge to build new experiences.

I realize the late homework (homework not done on time) has been an issue for teachers for a long time. There is no simple cure. I believe though class presentations students became more accountable and that late homework will decrease. I studied William Glasser, a Reality Therapist; he believed that human beings do something for a reason. For instance, students who do not get their homework completed do it for a reason. It may be what I think is the wrong reason, but it is still the student’s justification for not completing the assignment. I believe Reality Therapy can be applied to math homework. I just need to help students learn why math is needed in everyday life and thus students become inspired to do their work. Class presentations can be one of those tools. My goal as an educator is to have students take responsibility through classroom presentations. With students giving class presentations, they may see the relevance of understanding the mathematics being taught and late assignments may decrease.

### **Literature Review**

Math is one of those subjects vital to not only succeed in primary and secondary school, but also outside the academic setting. One thing that hampers academic growth is

late homework assignments. This is the area of study on which I am concentrating. I want to know if I can reduce late assignments through increased classroom participation.

Students will be able to participate weekly in the classroom through classroom presentations.

This literature review has allowed me to look at different researchers and compare their views on variables that affect the students in the classroom. I chose four different focus areas that affect student performance in getting homework done on time. These four focus areas are: student confidence, meaningfulness, homework relevance, and student understanding.

Students need to be challenged, yet have confidence in what they are attempting in the classroom. So what is confidence in the classroom? To me student confidence is students willing to take risks in explaining what they understand, and also feeling comfortable enough to explore ideas and/or concepts that they do not understand without feeling inadequate. Students need to be challenged (p. 12).

Homework needs to be meaningful to students. I want students to learn something that has meaning to them, to be relevant to their lives. Raymond and Leinenbach (2000) conducted research that tells how a teacher changed teaching mathematics and the transformation the educator went through. Raymond and Leinenbach stated:

Students to value mathematics. Students' experiences in school must bring them to believe that mathematics has value for them so they will have the incentive to continue studying math as long as they are in school. (p. 299)

This is so important. Students need to experience math in a way that allows them to gain meaning in their own lives, in and outside of school.

The third theme is student understanding. Looking at the 1980's at what was meant by understanding and assessment is different to my belief today. Zelinka (1980) wrote about trying to push students to excel and create advanced placement (AP) programs so the United States could keep up with the rest of the world (mainly Europe and the Eastern Block). Today, though, as an educator, I want to create a challenging atmosphere not so much to compete against other countries, states, schools, or even other students in math competition, but to allow students to become intrinsically motivated. This in turn can allow the growth of each student's mathematical understanding more deeply.

### **Student Confidence**

Student confidence is a very important part of success in the classroom. Students need to be challenged yet have a positive attitude and understand why homework is relevant to know math. Having a positive mindset will make a big difference when working mathematics or anything else in life. Taking something on in a positive manner gives people drive and ambition to see a positive outcome in my opinion. Silva, Moses, Rivers, and Johnson (1990) did a research project on middle school math students. The project was to teach 6<sup>th</sup> grade students a transition curriculum and then in 7<sup>th</sup> grade math. Then in their 9<sup>th</sup> grade year, students took college math preparatory courses. In Silva, Moses, Rivers, and Johnson's study, they wanted to improve curriculum development and train teachers what and how to teach. They stated: "Students must develop the expectation and the confidence that they can and will learn algebra if they apply themselves to the curriculum" (p. 388). In my experience, students who apply themselves have a vision beyond what most teachers have in mind for them. Through applying

themselves like they did in the research project of Silva, Moses, Rivers, and Johnson (1990), hopefully students can reduce late homework assignments.

If students do not believe in themselves they may not realize they have the potential to learn math. They may never be able utilize their full potential in mathematics. The project that Silva, Moses, Rivers, and Johnson (1990) conducted is based upon group-work and cooperation. One key thing that researchers stated was, “Each presentation helps to build students’ confidence and public speaking skills as well as their grasp of the course materials” (p. 382). In order to boost confidence, students need to have a positive attitude about mathematics.

Student should show a positive attitude towards their homework and working with their peers. A student having a healthy relationship in the classroom will encourage positive relationships with peers and teachers. This will allow students to build the confidence they need in the math classroom. Keating (1987) wrote about reducing classroom alienation: “Classes are more fun when taken with friends. Students may not bring their friends to class, but we can encourage acquaintanceships” (p. 409). Keating did a study on her own department of college professors by looking at their class evaluations. She believes patterns can be seen by looking at what students want in the classroom. To make sure that students develop a meaningful experience, student integration is needed in the classroom. This can improve teachers’ teaching, students’ learning, and classroom experiences in general. In group presentations not only am I hoping that students learn, but teach each other and build positive working relationships. Hopefully this will directly affect students’ attitudes in the classroom.

**Homework Relevance**

A key element in having a successful classroom is having students making the experience in the classroom meaningful. Students' engagement in math is something that may allow them to see the importance on knowing math. Beysdorfer (1982) discusses a project that she did in her classroom that made the students become engaged in writing a story. Beysdorfer stated:

Students introduced their aliens by reading descriptions or stories written during the unit. Questions flew and the period passed in a frenzy of sharing. Each alien was a unique and clearly fictional character. There was no stereotypes, no carbon copies of relatives, TV stars, or peers. My young writers had overcome the problem of sustaining, consistent and motivated characters and had a creative writing experience to remember (p. 76).

Beyersdorfer (1982) does what Keating wrote about seven years later. Beyersdorfer developed a make-believe robot for a language arts program. The teaching strategy allowed students to explore and integrate their learning style to the rest of the class when they had to share their ideas about the robot. Students were given a different way to develop their writing skills through the robot Keating developed. Like Beysdorfer, I am hoping that through classroom presentations students will gain a meaningful experience and gain more relevance, and classroom presentations will create less late assignments. I want my students to be able to create a presentation that will not only develop deeper thinking about what they are presenting to the class, but to help their peers out as well.

When creating a memorable learning moment I need to take heed that students still need direction. Yet, I want them work towards discovery. This part of classroom

participation is very hard for me to govern. When should I interject and give more guidance, which may cripple participation? Anderson, Brubaker, Alleman-Brooks, and Duffy (1985) talk about how successful seatwork is in first-grade classrooms. This study was directed towards independent seatwork and its success. Anderson, Brubaker, Allen-Brooks, and Duffy brought up a good idea for any instruction given in the class, that students should explain or justify what they learned in the classroom (1985). They researched 2<sup>nd</sup> grade students in four Title I schools in a mid-western city. They interviewed, surveyed and tested students to see how seatwork affected them. They realized that seatwork along with different ways to have students work in the classroom benefited the student. Even though I am not doing seatwork, I want my students to gain knowledge, and I want to see if presentations will be a way for students to learn math concepts.

### **Student Understanding & Assessment**

In the early 1980's a lot of teachers and people in general had beliefs similar to Zelinka (1980) in her article, *The State of Mathematics in Our Schools*. My perception of the article states that we are behind the times by the comparison of our scores to the rest of the world (Zelinka, 1980). Zelinka, unlike Silva, Moses, Rivers, and Johnson (1990), and Beyersdorfer (1982), believes the U.S. is already falling behind the times compared to the rest of the world. Zelinka is solely comparing our growth to the rest of the world, not to intra-personal growth. This is how many people relate student understanding and assessment to this day. I believe that teachers need to check students for understanding and making sure that the curriculum they are working on relates to the national standards.

These are great guidelines for teachers to follow (NCTM, 2000). Yet, make sure that teachers see growth within the students themselves.

To show student understanding, teachers can devise different ways of evaluating what the students understand. Beyersdorfer (1982) used a checklist to see students in the story. Dundes (2001), who did small group presentations in debate, used peer grading in terms of assessing what students know what is being taught. Students tended to focus on the main points being presented. She noticed the grading by the peers seemed to be more strict than she was when she graded the students. Peer review would be an inventive way to get feedback to the student who is presenting.

Checking for understanding is something that is important for teachers to do. I want to make sure students are understanding what needs to be learned during math time. Through classroom presentations I want to give guidelines on what needs to be presented, yet give students the ability to present with minimizing that a grade will be given to measure what they know about the subject that they present to the class. So I revised a rubric from a book called *Rubrics and Checklists* (2000). I do not want the grade to drive the boat but rather math concepts and interest to steer the way. Yet, I want the assessment to reflect the understanding of the student.

## **Conclusion**

My goal as an educator is to reduce late assignments through classroom participation. Raymond and Leinenbac (2000) talk about how a teacher uses math manipulatives to integrate algebra into all the middle school classes (grades 6-8). I implemented classroom presentations to help reduce late assignments by enhancing

student learning and involvement. Raymond and Leinenbach gave me insight on how change in the classroom can produce positive outcomes.

Anderson, Brubaker, Alleman-Brooks, and Duffy (1985) wrote an article about seatwork in first grade classrooms. The authors show descriptive data from a study of how well seatwork works for different achievement groups (1985). Even though I am working with classroom presentations that primarily deal with small groups, students give insight of when seatwork is not always plausible. I realize that students need different methods of teaching to understand concepts. It was my hope that the groups would naturally show different teaching styles.

Silva, Moses, Rivers, and Johnson (1990) believed that all children can learn algebra. Their study was done in inter-city schools, found in Boston, MA. My study is done in a small mid-west school. Other than that, I hope that my result will have similar impact on the student population, and that the students will learn math in a meaningful way that can be applied to the outside world.

Through the themes of student confidence, meaningful math, student understanding and assessment and providing a positive atmosphere for the students as my variables that I would see a reduction in late daily work. Gaining this knowledge makes my problem of analysis worth knowing about.

### **Purpose Statement**

The purpose of my action research project is having students prepare and give class presentations. I hope that class presentations led to students wanting to learn (ownership) and this led to fewer late homework assignments and an increase in student understanding in math. Through this research project I wanted to see if classroom



presentations would have a positive affect on the purpose of my research project. I wanted to see if what I was doing in the classroom was beneficial for the students.

My first research question is: what will happen to the frequency and excuses for students turning in homework assignments late after implementing homework presentations? My second research question is: what will happen to students' attitudes towards mathematics and homework after implementing presentations? My third research question is: is the level the student understanding of mathematical concepts after implementing homework presentations? My last research question is: how has this research project affected my teaching?

### **Method**

I started my action research January 3, 2008, and finished March 28, 2008. I did not do presentations prior to this semester of this year. So it was all new to the 7<sup>th</sup> grade class. All three classes of 7<sup>th</sup> grade that I teach had a chance to participate in this research. Even if students chose not to be part of the study, students had to present weekly. My goal was to have four to six students present every Friday over prior stuff that I taught. We had to cut it to two to three because there was not enough time in the period to get four presentations completed. The students were graded on a rubric that I gave them (see Appendix A). I modeled to students what an "A" presentation would look like, a "B" presentation, a "C" presentation, and a "D" presentation. I wanted to make sure the students knew what was expected of them.

The first week the students took a survey on math (see Appendix B). The students took the same survey again on their attitude towards math on the last day of the 12-week research project. I also interviewed eighteen students on the same questions (see

Appendix C) on how they felt about the presentations that they participated in as a presenter and as a fellow peer. I intended to interview four students weekly but only interviewed three because of time constraints. Each interview lasted five to seven minutes.

The students journaled every week before the presentations, For a total of ten journals. I gave the students journal prompts that related to each of my three research questions. I just had the students try to write five minutes without stopping on the specific prompt. I told the students to do their best and not to worry about the grammar. I was more worried about their content. I had a few students create list of phrases or words that related to the journal prompt.

I used test averages of students who participated in the study from second quarter to third quarter to see if there was improvement. Using Grade Master (a school wide grading system) is was easy to track test average progress. Every day I completed a checklist to see if student engagement and attitude had changed over the 12 weeks (see Appendix D).

All my paperwork was filed away in manila envelopes. I did do a screen casting of all the presentations that students did. This is a simple procedure that students did on my apple computer and Smart board. Students simply recorded their presentation on the smartboard and recorded what they did during the presentation. They were able to record all the work they did, their voice, and the questions students asked. The only thing the reader cannot see is the student who is giving the presentation.

I analyzed the data by looking at the general consensus on the surveys and journals to find out what my students were experiencing in the action research project.

Test averages and presentation scores were an indication if students were gaining knowledge and understanding of the information being taught. The tracking sheets that I used with the students helped indicate during the research program if presentations showed any growth in my teaching or students being intrinsically motivated. When interviewing the students I found out that they gained a lot from the presentations. One student commented, “Even if I know the presentation, the presentation is a great review. The screencasts themselves were good tools for students to refer back to on” (2008)

### **Findings**

I first discuss the structure of my classroom before I started the action research. After I describe how I changed my teaching during the action research, I talk about my research questions, the assertions that I developed through analyzing my data, and the evidence that supports my findings.

Before Math in the Middle, a lot of the required math that I taught came from the textbook. I was strictly worried about covering the material so students could pass the state assessment required by our district. I taught out of the book. My lesson plans came straight out of the textbook. The weekly plans were straight-forward, out of the book, which made them concrete and very rigid. The students appeared to be disinterested, there was minimum engagement on math discussion, and late assignments had been prevalent.

My action research has made a lot of changes in the classroom. Two or three students presented on different concepts each week. These students were already taught this math concept. Each student chose a concept that he/she could re-teach to the class. The goal is to have the student re-teach a math concept that will help strengthen the rest

of the class. For example, I had Joe present on adding and subtracting integers, negative and positive numbers. Joe defined what negative and positive numbers are, and the rules of adding and subtracting them. Then, Joe had the rest of the class do some sample problems. Last, Joe had the class do story problems that relate to adding and subtracting integers, emphasizing the negative integers. The rest of the class did a great job, doing the problems and asking Joe about the rules of adding and subtracting negative integers.

I still create lesson plans every week with students giving presentations weekly. The plans are more as a guide for me and the students. I do not allow my lesson plans to dictate how I teach the material. My students are doing a better job presenting ideas and interacting with their peers about math. I felt that I am more of a facilitator. During and after the action research project, students were asking questions whose focus went beyond just getting the work done. Students were actually wondering why things do occur. Thus the following research questions were things that I wanted to have further insight into.

*Student Attitudes:* What will happen to students' attitudes towards mathematics and homework after implementing homework presentations? After looking at the attitudes towards mathematics and homework since homework presentations were implemented, I found that students need to spend more time preparing their presentations to feel comfortable about the concept that they are going to re-teach to their peers. A student's attitude is so important. Students need to have a sense of purpose and this comes from a positive productive attitude. I try to foster this through the classroom presentations.

Evidence that I have that to support this assertion are the student surveys and my

own teacher journaling. The students' surveys indicated to me that if we spent more time exploring questions about the lesson being taught, it would make understanding math better. Here are some of the comments:

"The thing I hate the most about math is when I learn something and forget it when I go home to do my work."

"I need to have the teacher(s) slow down so I can understand it."

"If you go too fast I get confused."

This told me that slowing the pace down creates a better learning atmosphere.

I also wrote in my journal about students preparing their lessons that will allow students to have a better understanding of what was being taught. "Students need to take time to prepare their projects, and not rush to get them completed. Students with well-developed presentations have more student involvement during their presentation" (Personal Journal, March 2008). Allowing students to have time to develop their presentations is detrimental to having present something with quality.

Evidence from my interviews with students indicated that the class thought homework presentations were beneficial:

"I was nervous but excited to share with my classmates what I understood."

"I thought homework presentations were dumb, but I thought I learned more than I ever thought I would."

"I had fun asking my friends questions to see if they really understood what they were teaching."

These comments made by the classroom students indicated to me that they gained a positive outlook on math concepts and enjoyed what was being taught in the classroom.

*Student Understanding.* What will happen to the level of student understanding of mathematical concepts after implementing homework presentations? After implementation of homework presentations, students have strengthened their understanding of in the 7<sup>th</sup> grade by what is being presented to them by peers.

I interviewed 12 students in gaining insight about my action research. Many of the students felt that they learned something from their classmates' presentations. Some of the students' responses about classroom presentations are:

“Even the bad presentations make me think about what they are talking about.”

“Presentations let me look at doing a problem different.”

“They can teach it in a different way that makes more sense sometimes.”

Presentations helped students gain better insight, and understand the right process in working specific math problems.

Another piece of evidence that shows that students are gaining knowledge is the footnotes that I have put at the bottom of the presentation rubrics. I made comments that students in my 3<sup>rd</sup> period class get involved and ask questions. The students wanted to find the answers to some of the sample problems that are given to them. The rubric shows that they are listening and trying to re-connect to the problems they are being re-taught. One example, is when a girl named Lynnsey<sup>1</sup> presented her homework presentation. I commented on the rubric, “she shows great understanding in the presentation.” Lynnsey defined the fraction concept and gave examples for her classmates to work so she could make sure they understood.

In journaling, the students wrote about how presentations have assisted them in developing math skills. One student wrote, “Even though I know this stuff being taught it

---

<sup>1</sup> All names are pseudonyms.

makes me remember what we were taught earlier in the year.” Another student wrote, “I like how my friends teach a math problem, sometimes it’s easier for me to understand.”

This indicates that peer teaching is an effective tool in my classroom.

*Late Work.* What will happen to the frequency and excuses for students turning in homework assignments late after implementing homework presentations? Since I have started homework presentations, the frequency of late homework assignments has not decreased. In fact I believe that there has been an increase in late or absent assignments. Presentations have not motivated students to complete assignments on time.

One indication that students are not getting there work completed is that I had a student who had 12 assignments not completed in the 2<sup>nd</sup> quarter. He did, however, present once to the class and did an excellent job. By the end of 3<sup>rd</sup> quarter, he was missing 15 assignments. This particular student actually had fewer late assignments in second quarter than third quarter. Over all, number of late assignments in my grade book did not change significantly. Actually as stated above, there was an increase of late assignments. The chart below shows the number of late assignments in second quarter compared to third quarter.

Quarter	Total Number of Assignments	Total Number of Missing Assignments
2nd Quarter	125	111
3rd Quarter	168	125

During my interview, a question that I asked the students was: “What is one thing I can do to lessen late assignments?” Here are a few of the responses:

“Nothing, it is up to the student to want to do it.”

“They don’t care about school, they are just here to be with their friends”

“Make them stay after school and learn a lesson.”

“There parents should want them to do better.”

These students who commented were a mixture of students who do have late assignments and ones that do not. The students that it is totally up to each and everyone of their peers to be responsible to get the homework down on time.

In one of my teacher journals, I wrote that students who do not get their homework completed are the same ones who do not get their presentations done on time. I really thought that presenting and the use of technology would motivate these students to do better in the classroom. I really have not seen any indication that technology has curbed the late assignment problem.

Over all this evidence indicates that homework presentations did not make a significant impact on late assignments.

### **Conclusions**

The findings made me look deeper into my pedagogy. What do I want my students to get out of the math classes? I want my students to be able to look at math more deeply. Students need to understand that what they are learning now needs to have meaning. In an article Dundee (2001) wrote, she believed that small group presentations generated interest and makes students interact with each other, debating items of interest. I concur, it allows students to discuss and look at problems at the deeper level. I had a student who discussed problem solving techniques and went through the steps of understanding finding out how to solve problems. During the presentation students went over the steps



and discussed the relevance of each step. I was really pleased how my students deliberated over the steps and how they were important to solving problem for the week, especially Habits of Mind Problems.

Through classroom presentations, I found that students did find some relevance, and interaction happened more often when presentations was student led. I was more or less there to help students find different possibilities or reasons: why some concepts work. Students were having discussions about why and how math works. Presentations themselves are like a map. They allowed students to be immersed in math and allow students to follow a direction they want to understand more. This was also talked about in the journal article by Silva, Moses, Rivers, and Johnson (1990). They believed that immersing students into math must have a sense of direction and understanding to be successful. Yet, they do not believe in redundancy. Reviewing Algebra over and over like my classroom did with homework presentation according to Silva, Moses, River, and Johnson (1990) would cause boredom, and student to lose interest. This is something I did not observe. In fact, students seemed to be more engaged in something that they could relate too. When I had a student review graphing a linear equation, students were excited to answer questions and were able to connect slope to the equation.

Even though classroom presentations changed attitudes and created avenues for students to generate a deeper understanding of mathematics taught in 7<sup>th</sup> grade, it did not curb the late assignments.

### **Implications**

Looking at the research, I see that classroom presentations are a positive thing. They can prompt students to think and interact. Next year, I will continue to work on

classroom presentations. I will continue to try to make them more beneficial to the students and learning atmosphere. My hope is that this will give the students the chance to show me what direction they need to go when teaching math concepts, thus keep these students motivated in their classroom.

My challenges continue to be students with late assignments and not getting the presentations completed. I just cannot give up. If students can reduce late homework assignments, this will help them know what they do not understand and ask ask questions to keep them up, academically with the rest of the class. My key, I believe, is getting these students involved and appreciating what math can give to them.

## References

- Anderson, L. M., Brubaker, N. L., Alleman-Brooks, J., & Duffy, G. G. (1985). A qualitative study of seatwork in first-grade classrooms. *The Elementary School Journal*, 86, 123-140.
- Beyersdorfer, J. (1982). Close encounters of a junior high kind. *The English Journal*, 71, 75-76.
- Dundes, L. (2001). Small group debates: Fostering critical thinking in oral presentations with maximal class involvement. *Teaching Sociology*, 29, 237-243.
- 40 Rubrics & Checklists, (1999). *To assess reading and writing*. New York, NY: Fiderer, A.
- Keating, B. R. (1987). Reducing classroom alienation: Applications from theory. *Teaching Sociology*, 15, 407-409.
- National Council of Teachers of Mathematics. (2000). *Principles and standards for school mathematics*. Reston, VA: Author.
- Raymond, A. M. & Leinenbach, M. (2000). Collaborative action research on the learning and teaching of algebra: A story of one mathematics teacher's development. *Educational Studies in Mathematics*, 41, 283-307.
- Silva, C. M., Moses, R. P., Rivers, J., & Johnson, P. (1990). The algebra project: Making middle school count. *The Journal of Negro Education*, 59, 375-391.
- Zelinka, M. (1980). The state of mathematics in our schools. *The American Mathematical Monthly*, 87, 428-432.

## Appendix A

### Rubric for Assessing Classroom Presentations

Name of presenter(s): \_\_\_\_\_

Assessing \_\_\_\_\_  
(math concept)

Description of the presentation's goal:

---



---



---

#### Scores

##### (4) Proficient

The work product or performance achieves all goals set for by the task. It is complete and indicates a very good understanding of knowledge required to complete the presentation.

---



---

##### (3) Satisfactory

The work product or performance achieves many of the goals set for the task. It is almost complete and indicates an adequate understanding of the knowledge required to complete the presentation.

---



---

##### (2) Developing

The work product or performance achieves some of the goals set for the task. It is partially complete and indicates a limited understanding of the knowledge required to complete the presentation.

---



---

##### (1) Novice

The product or response does not meet the basic requirements of the task. Although there may be an attempt to meet one or two of the presentation requirements, the response is incomplete.

---



---

## Appendix B

# MATH SURVEY

**Please give your honest response to each statement, 1 strongly disagree, 2, disagree, 3 neutral, 4 agree, 5 strongly agree.**

1. I like math.	1	2	3	4	5
2. I am good at math.	1	2	3	4	5
3. Math skills are important for other skills.	1	2	3	4	5
4. I am able to show the work required to solve math problems.	1	2	3	4	5
5. I like to answer questions asked in math class.	1	2	3	4	5
6. I feel comfortable asking questions in math if I don't understand a concept.	1	2	3	4	5
7. I consider math to be my strongest subject in school.	1	2	3	4	5
8. I consider math to be an important subject to know in the real world.	1	2	3	4	5
9. Class presentations would be a fun way to learn math.	1	2	3	4	5
10. I think it is hard to complete daily assignments.	1	2	3	4	5
11. I think math is hard for most people to understand.	1	2	3	4	5
12. I think it is hard to study for math tests.	1	2	3	4	5

**Complete the following statements.**

13. This is my favorite math concept and why:

14. One good thing that happened in math is:

15. One not so good thing that happened in math is:

16. Two years of high school math are required to graduate from O'Neill Public Schools. I plan to take

(circle one) 1    2    3    4    4+

math classes when I get into high school.

## Appendix C

### Individual Student Interview Questions

#### Research Question:

2. What will happen to the frequency and excuses for students turning in homework assignments late after implementing homework presentations?

Student:

Class:

Date:

1. What do you like best about Math?
2. What do you like least about Math?
3. What makes math easy or difficult for you?
4. What could teachers do to help students with math?
5. On average, how would you rate your involvement in math class? Why?  
(1 being 'not involved' and a 4 being 'very involved')
6. What helps to get you involved in math class?
7. Do classroom presentations help get you involved in your learning? If so, why do you think that is or is not?
8. What makes you participate more in classroom presentations?
9. What do you think about classroom presentations?
10. What do you like about classroom presentations?
11. What do you dislike about classroom presentations?
12. Are you confident in your math ability? Why?
13. Are you confident in your math ability when presenting in front of your peers?  
Why do you think that is?
14. Are you more confident when you work alone or when you not accountable in presenting information to your peers? Why do you think that is?
15. As I think about planning for next year's math classes, what advice would you give me about decreasing the amount of late homework students turn in?
16. Is there anything else I should know about you to better understand your problem solving in math or your general math experience?

## Appendix D

Key Elements for a Successful classroom	"+" or "-"	Comments
Students are engaged in discussion.		
Students are task driven.		
Students are using different prompts used in the classroom to relate to a math concept.		
Students relate math concepts in group discussion to real-life situations		
Students utilize step-by-step process to reduce errors in homework.		
Students utilize independent time to understand math homework.		
Students demonstrate prior skills to connect to new math concepts.		
Skills taught by classroom teacher in direct instruction are applied in the assignment given.		